

What is claimed is:

- 1 1. A method for executing a locked bus transaction in a multi-node system, comprising:
2 initiating a locked-bus transaction at a bus agent;
3 transmitting a locked-bus request to a first node controller; and
4 deferring the locked-bus transaction at the bus agent by said first node controller.
- 1 2. The method of claim 1 further comprising:
2 transmitting the locked-bus request from the first node controller to a second node
3 controller.
- 1 3. The method of claim 2 further comprising:
2 preventing bus transactions on a bus coupled to said second node controller.
- 1 4. The method of claim 3 further comprising:
2 performing the locked-bus transaction by the bus agent over the multi-node system.
- 1 5. The method of claim 1 further comprising:
2 asserting a signal to said bus agent by said first node controller to prevent said bus agent
3 from initiating a bus transaction.

1 6. The method of claim 5 further comprising:
2 transmitting the locked-bus request from the first node controller to a second node controller.

1 7. The method of claim 6 further comprising:
2 preventing bus transactions on a bus coupled to said second node controller.

1 8. The method of claim 7 further comprising:
2 deasserting said signal to said bus agent by said first node controller.

1 9. The method of claim 8 further comprising:
2 performing the locked-bus transaction by the bus agent over the multi-node system.

1 10. A multi-node system comprising:
2 a bus agent to initiate a locked-bus transaction; and
3 a first node including a first bus and a first node controller to receive a locked-bus request and
4 defer the locked-bus transaction at the bus agent.

1 11. The system of claim 10 further comprising:
2 a second node including a second bus and a second node controller to receive the locked-
3 bus request from the first node controller.

1 12. The system of claim 11 wherein said second node controller is to prevent bus transactions
2 on said second bus.

1 13. The system of claim 12 wherein the bus agent is to perform the locked-bus transaction
2 over the multi-node system.

1 14. The system of claim 10 wherein said first node controller is to assert a signal to said bus
2 agent to prevent said bus agent from initiating a bus transaction.

1 15. The system of claim 14 further comprising:
2 a second node including a second bus and a second node controller to receive the locked-bus
3 request from the first node controller.

16. The system of claim 15 wherein said second node controller is to prevent bus transactions
on said second bus.

17. The system of claim 16 wherein said first node controller is to deassert said signal to the
bus agent.

1 18. The system of claim 17 wherein the bus agent is to perform the locked-bus transaction
2 over the multi-node system.

1 19. A method for executing a locked bus transaction in a multi-node system, comprising:
2 initiating a locked-bus transaction at a bus agent;
3 transmitting a locked-bus request to a first node controller;
4 deferring the locked-bus transaction at the bus agent by said first node controller;

5 transmitting the locked-bus request from the first node controller to a switching agent;
6 and
7 preventing further transactions from said switching agent.

1 20. The method of claim 19 further comprising:
2 performing the locked-bus transaction by the bus agent over the multi-node system via the
3 switching agent.

1 21. A method for executing a locked bus transaction in a multi-node system, comprising:
2 initiating a locked-bus transaction at a bus agent for a first I/O node including a first I/O
3 device;
4 transmitting a locked-bus request to a first node controller; and
5 deferring the locked-bus transaction at the bus agent by said first node controller.

1 22. The method of claim 21, further comprising:
2 transmitting the locked-bus request from the first node controller to the first I/O node.

1 23. The method of claim 22, further comprising:
2 preventing transactions at the first I/O node for I/O devices coupled in said first I/O node.

1 24. The method of claim 23, further comprising:
2 performing the locked-bus transaction by the bus agent over the multi-node system to the
3 first I/O device.